

**Notice of Allowability**

Application No.

09/537,773

Examiner

Nitin Patel

Applicant(s)

SHIBATA ET AL.

Art Unit

2673

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/08/2004.
2. ☒ The allowed claim(s) is/are 1,4,5,19-24,26-31 Now renumbered 1-15 respectively.
3. ☒ The drawings filed on 29 March 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 06/11/2002
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mark Dodd on 12/09/2004.

2. Claims 6,8-18 are cancelled.

### **REASON FOR ALLOWANCE**

3. Claims 1,4,5,19-24,26-31 are allowed. Claims 2,3,6,7,8-18,25 have been cancelled.

4. The prior art fails to teach or suggest an apparatus display having a controller which is connected to the driver, the controller capable of controlling the driver to repeatedly select only part of the scan electrodes by controlling the shift register of the scan electrode driver to perform writing on only part of the pixels of the liquid crystal display corresponding to the selected scan electrodes, the driver performs repetitious writing on the part of the pixels of the liquid crystal display corresponding to the selected scan electrodes by applying voltage pulses including a reset pulse to reset the liquid crystal to a homeotropic state and a selection pulse to select a desire display state of the liquid crystal, the voltage pulses including the reset pulse and the selection pulse

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being applied to each of the selected scan electrodes sequentially for repetitious writing as claimed with combined limitation of claim 1.

The prior art fails to teach or suggest an information display apparatus wherein writing is performed repeatedly on the part of the pixels of the liquid crystal display corresponding to the selected scan electrodes and the part of the pixels of the liquid crystal display which does not correspond to the selected scan electrodes and which maintain a display by use of a memory effect of the liquid crystal includes pixels making displays of intermediate tones as claimed with combined limitation of claim 30.

The prior art fails to teach or suggest an information display apparatus wherein the driver performs repetitious writing on the part of the pixels of the liquid crystal display corresponding to the selected scan electrodes by applying voltage pulses including a reset pulse to reset the liquid crystal to a homeotropic state and a selection pulse to select a desired display state of the liquid crystal, the voltage pulses including the reset pulse and the selection pulse being applied to each of the selected scan electrodes sequentially for repetitious writing and the part of the pixels of the liquid crystal display does not correspond to the selected scan electrodes and which maintains a display by use of a memory effect of the liquid crystal includes pixels making displays of intermediate tones as claimed with combined limitation of claim 31.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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**Conclusion**

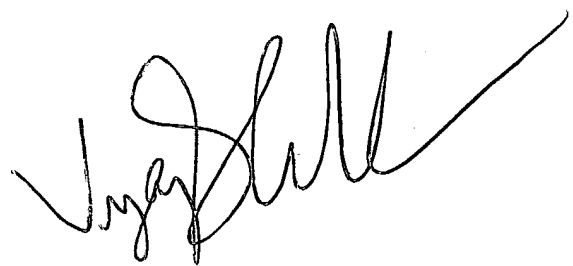
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin Patel whose telephone number is 703-308-7024. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin H Shalwala can be reached on 703-305-4938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NP

December 9, 2004



VIJAY SHANKAR  
PRIMARY EXAMINER